DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024029 Address: 333 Burma Road **Date Inspected:** 16-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 1500 **Project Name:** SAS Superstructure **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Mr. Li Yan Hua No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Baskar Govindarajan, was present during the times noted above for observations relative to the work being performed.

Bay #19

This QA Inspector observed the following work in progress,

Flux Cored Arc Welding (FCAW)

Weld joint- 007/008, Located on OBG Components, Bike path BK 024A6-001. Welder is identified as 208641. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

Weld joint- 098/ 099, Located on OBG Components, Bike path BK 024A6-001. Welder is identified as 208632. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-B-T-2134-ESAB.

Weld joint- 083/ 085, Located on OBG Components, Bike path BK 024A8-001. Welder is identified as 208641. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

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Weld joint- 0003, Located on OBG Components, Bike path BK 024A1-001. Welder is identified as 062807, 062739. ZPMC Quality Control Inspector (QC) is identified as Li Ping. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

Heat Straightening:

Heat Straightening being performed on Bike Path identified as BK023A1 - 001-25 to 34 by oxy-acetylene flame method to remove the distortion that occurred after welding. ZPMC Quality Control (QC) Inspector is identified as Li Ping present at the location. This activity appeared to comply with the Heat Straightening Report # HSR1 (B) -10364. (See photo)

Bay #16

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW)

Repair welding of Weld joint- 003, Located on Bike path Hand rails, FS40-003. Welder is identified as 201905. ZPMC Quality Control Inspector (QC) is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-2G (2F) -Repair.

Repair welding of Weld joint- 001, Located on Bike path Hand rails, FS17-003. Welder is identified as 053755. ZPMC Quality Control Inspector (QC) is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-2G (2F) -Repair.

Heat Straightening:

Heat straightening being performed on OBG Component Crash Barriers, E5-SB30-001, W2-SB27-001, W2-SB28-001 by oxy-acetylene flame method to remove the distortion that occurred after welding. ZPMC Quality Control (QC) Inspector is identified as Li Ping present at the location. This activity appeared to comply with the Heat Straightening Report # HSR1 (B) – 10176.

Bay #14

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW)

Repair welding of Weld joint- 004 as per WRR no. B-WR-20756, Located on Traveler rail TR 3021TR2-001. Welder is identified as 067752. ZPMC Quality Control Inspector (QC) is identified as Sun Tian Liang. The

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welding variables recorded by QC appeared to comply with the WPS-345-SMAW-2G (2F)-Repair.

Repair welding of Weld joint- 007 as per WRR no. B-WR-20756, Located on Traveler rail TR 3021TR2-001. Welder is identified as 045268. ZPMC Quality Control Inspector (QC) is identified as Sun Tian Liang. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-2G (2F)-Repair.

Witness of Ultrasonic Testing (UT)

This QA inspector Witnessed 100% UT performed by ZPMC Quality Control personnel. The member is identified as OBG Component, Traveler rails. The component and weld designation identified as follows:

TR3003TR1-023, 025, 019, 015 TR3002TR1-008, 007, 006, 010

Trial assembly yard

Magnetic Particle Testing (MT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 09151

This QA inspector performed (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated a TL 6028 MT report for this date. The member is identified as OBG Lift 13 components. The weld designations reviewed are as follows:

SEG3007X - Jt. nos. - 001~034,037~042,045~054,057,058, 061~078,081~090,093, 094,097~100, 151,152,154,156,158, 160,162,166,168,172, 174,186,190,192,196,198,202,204,209,211,215, 217,

> 221,223,227,235,237, 241,243,246,249,255, 257,261,263,265,267, 271,272,273,501,502, 564,571,572

For further information see below pictures:-

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

No relevent Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By:	Baskar,Govindarajan	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer